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10/531,737	04/18/2005	Toshihiko Nakane	TOS-161-USA-PCT	3481
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EXAMINER				
CHUI, MEI PING				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/531,737

**Applicant(s)**

NAKANE ET AL.

**Examiner**

MEI-PING CHUI

**Art Unit**

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2008 and 22 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)  
Paper No(s)/Mail Date N/A.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application.
- 6) ☐ Other: \_\_\_\_\_.

***DETAILED ACTION***

***Status of Action***

(1) Receipt of Amendments/Remarks filed on 09/02/2008 is acknowledged. Claims 1-14 are currently presented in this application. Claims 1-3, 5 and 7-8 have been amended.

(2) Receipt of the Declaration under 37 CFR 1.132 filed on 09/22/2008 is acknowledged. The Declaration has been considered by the Examiner and placed in the file.

(3) Acknowledgment is made of applicants' claim for foreign priority based on the foreign patent application Nos. 2002-311033, 2003-101489 and 2003-332802 filed in Japan. A certified English translation of each of the foreign patent application above was received on 09/02/2008.

(4) Upon further consideration, Applicant's amendment necessitated new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL.**

***Status of Claims***

Accordingly, claims **1-14** are presented for examination on the merits for patentability.

Rejections and/or objections not reiterated from the previous Office Action is/are hereby withdrawn. The following rejections and/or objections are either reiterated or

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newly applied. They constitute the complete set of rejections and/or objections presently being applied to the instant application.

***Claim Rejections - 35 USC § 112 second paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims **10** and **11** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims **10** and **11** recite the term “the deodorizing cosmetic”, which lacks antecedent basis because this term is not recited in their precedent claims.

**The previous rejection with respect to claims **10** and **11**, under 35 U.S.C. 112 second paragraph, as being indefinite is maintained.**

***Response to Arguments***

Applicants’ arguments filed on 09/02/2008 have been fully considered but they are not persuasive because the term “the deodorizing cosmetic” has not been amended.

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*New Grounds of Claim Rejection*

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**(1) Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (U. S. Patent No. 5,723,110) in view of Gilbert et al. (U. S. Patent No. 5,211,870).**

*Applicants Claim*

Applicants claim a composition for skin treatment comprising (i) an anti-bacterial zeolite having silver, zinc and ammonium ion substitutions and (ii) trisalt ethylenediamine hydroxyethyl triacetate.

***Determination of the scope and content of the prior art  
(MPEP 2141.01)***

Yamamoto et al. teach a deodorant cosmetic composition has superior deodorizing effect and superior resistance to discoloration comprising an antibacterial zeolite (column 2, lines 3-8).

Yamamoto et al. also teach that the zeolite can be a natural zeolite or an artificial zeolite, in which the zeolite has all or parts of the ion exchangeable ions substituted by ammonium ions and antibacterial metal ions, wherein the antibacterial metal ions, preferably, are silver, copper and zinc ions. Specifically, the antibacterial zeolite, which contains 0.1 % to 15 % of silver ions, 0.1 % to 8 % of zinc ions, and up to 20 % of ammonium ions, such as 0.5 % to 5 % of ammonium ions, is preferred (column 2, lines 51-56 and column 3, lines 14-26).

Yamamoto et al. also teach other components, such as ethylenediamine tetraacetic acid can be included in the deodorant cosmetic composition (column 10, lines 43, 64-65 and Examples 65 and 68).

***Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)***

Yamamoto et al. do not specifically teach the use of trisalt ethylenediamine hydroxyethyl triacetate in combination with an antibacterial zeolite. However, Yamamoto et al. teach that the antibacterial metal ions-containing zeolite can be used in combination with ethylenediamine tetraacetic acid (EDTA) to produce a deodorant

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cosmetic composition that has superior deodorizing effect and superior resistance to discoloration. In addition, this deficiency is also cured by the teaching of Gilbert et al.

Gilbert et al. teach an improved personal cleansing composition comprising an odor controlling agent and preservatives (column 1, lines 49-55 and column 8, lines 32-33). Gilbert et al. teach that zeolite is used as an odor-controlling agent in the composition (column 2, lines 3-7, 15-19 and column 18, claim 5) and the preservatives, i.e. sodium ethylenediamine tetraacetate (sodium EDTA), can be incorporated in the composition to prevent color and odor degradation (column 12, lines 62-66).

***Finding of prima facie obviousness Rational and Motivation  
(MPEP 2142-2143)***

It would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the teachings of Yamamoto et al. and Gilbert et al. to arrive at the instant invention.

One of ordinary skill would have been motivated to incorporate a preservative, i.e. sodium EDTA, which can help to improve the anti-discoloration and odor degradation of a zeolite-containing personal care composition. In addition, one of ordinary skill would have been motivated to utilize EDTA instead of trisalt ethylenediamine hydroxyethyl triacetate because they both act as anti-discoloration agents, and thus are interchangeable functional equivalent anti-discoloration agents.

From the teachings of the references, it would have been obvious that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie*

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obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

**(2) Claims 2-5, 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (U. S. Patent No. 5,723,110).**

***Applicants Claim***

Applicants claim a composition for skin treatment comprising (i) an anti-bacterial zeolite having silver, zinc and ammonium ion substitutions and (ii) alum and/or dried alum, or (ii) polyoxyethylene-polyoxypropylene 2-decyltetradecyl ether, wherein the polyoxyethylene unit of the polyoxyethylene-polyoxypropylene 2-decyltetradecyl ether is 20-28 and the polyoxypropylene unit is 10-16.

***Determination of the scope and content of the prior art  
(MPEP 2141.01)***

Yamamoto et al. teach a deodorant cosmetic composition has superior deodorizing effect and superior resistance to discoloration comprising an antibacterial zeolite (column 2, lines 3-8).

Yamamoto et al. also teach that the zeolite can be a natural zeolite or an artificial zeolite, in which the zeolite has all or parts of the ion exchangeable ions substituted by ammonium ions and antibacterial metal ions, wherein the antibacterial metal ions, preferably, are silver, copper and zinc ions. Specifically, the antibacterial zeolite, which contains 0.1 % to 15 % of silver ions, 0.1 % to 8 % of zinc ions, and up to 20 % of



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ammonium ions, such as 0.5 % to 5 % of ammonium ions, is preferred (column 2, lines 51-56 and column 3, lines 14-26).

In addition, Yamamoto et al. teach that the amount of antibacterial zeolite blended in the cosmetic composition is preferably at least 0.1 % by weight in order to obtain a remarkable deodorizing effect; however, the maximum amount is depended on the type of product, such as for an aerosol or stick type, a maximum amount of 70 % or less by weight is preferable (column 4, lines 34-63).

Yamamoto et al. further teach that the particle size of the antibacterial zeolite is preferably not more than 10  $\mu\text{m}$ , and the range of particle sizes is such that particles which exceed 10  $\mu\text{m}$  are not more than 20 % of the total antibacterial zeolite. More specifically, Yamamoto et al. teach a specific type of zeolite containing silver, zinc and ammonium ions, and has average particle size of about 1.5  $\mu\text{m}$  (which sold under trade name ZEOMIC AJ10D) (column 4, line 65 through column 5, line 3, and column 17, lines 27-31).

Yamamoto et al. also teach that the deodorant cosmetic composition can be selectively blended with an aluminum compound that would further enhance the deodorizing effect caused by enhancing the sweat suppressing effect. Suitable aluminum compounds, i.e. aluminum chlorohydroxy compound or alum, can be used (column 7, lines 33-48). Yamamoto et al. then teach that the amount of aluminum compound (e.g. aluminum hydroxychloride) can be from 2 % to 13 % by weight (see Examples 49-51, 56 and 70). With respect to the weight ratio of aluminum compound and antibacterial zeolite, Yamamoto et al. specifically teach a pressed powder, which contains 5 % by weight of aluminum hydroxychloride and 5 % by weight of silver, zinc and ammonium

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ions-containing zeolite (column 29, Example 70). Therefore, the weight ratio of the alum to zeolite is about 1, which is more than 0.1, and thus it meets the limitation as recited in claims 6 and 12-14 in that the mass ratio of the alum to the zeolite is 0.1 or more.

Yamamoto et al. also teach other components, such as hydrophilic anionic surfactant (e.g. POE-POP 2-decyltetradecyl ether) and ethylenediamine tetraacetic acid (EDTA) can be included in the deodorant cosmetic composition (column 10, lines 43, 64-65 and Examples 65 and 68).

***Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)***

Yamamoto et al. teach the deodorant cosmetic composition can include surfactant, such as polyoxyethylene-polyoxypropylene 2-decyltetradecyl ether; however, Yamamoto et al. do not specifically teach the polyoxyethylene-polyoxypropylene 2-decyltetradecyl ether has 20-28 ethylene oxide units (E.O.) and 10-16 of propylene oxide units (P.O.).

***Finding of prima facie obviousness Rational and Motivation  
(MPEP 2142-2143)***

It would have been obvious to a person of ordinary skilled in the art at the time the invention was follow the guidance of Yamamoto et al. to arrive at the instant invention.

One of ordinary skill would have been motivated to do so because the prior art, namely Yamamoto et al., has already taught all the claimed components and their amount for producing the cosmetic composition, such as a deodorant.

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With respect to the ethylene oxide unit and the propylene oxide unit of the ether as set forth above, it is merely judicious selection and routine optimization, and would have been obvious to a person of ordinary skill in the art to try different level of ethylene oxide and propylene oxide present in the POE-POP ether ester surfactant, dependent on the desirable form of the skin treatment composition to be manufactured.

From the teachings of the reference, it would have been obvious that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

**(3) Claims 6 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (U. S. Patent No. 5,723,110) in view of Fujita et al. (European Patent No. 1099474 A1).**

*Applicants Claim*

Applicants claim a composition for skin treatment comprising (i) an anti-bacterial zeolite having silver, zinc and ammonium ion substitutions and (ii) alum and/or dried alum, wherein the average particle size of the anti-bacterial zeolite is 10  $\mu\text{m}$  or less and the average particle size of the alum is 0.01-50  $\mu\text{m}$ .

***Determination of the scope and content of the prior art  
(MPEP 2141.01)***

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Yamamoto et al. teach a deodorant cosmetic composition has superior deodorizing effect and superior resistance to discoloration comprising an antibacterial zeolite (column 2, lines 3-8).

Yamamoto et al. also teach that the zeolite can be a natural zeolite or an artificial zeolite, in which the zeolite has all or parts of the ion exchangeable ions substituted by ammonium ions and antibacterial metal ions, wherein the antibacterial metal ions, preferably, are silver, copper and zinc ions. Specifically, the antibacterial zeolite, which contains 0.1 % to 15 % of silver ions, 0.1 % to 8 % of zinc ions, and up to 20 % of ammonium ions, such as 0.5 % to 5 % of ammonium ions, is preferred (column 2, lines 51-56 and column 3, lines 14-26).

In addition, Yamamoto et al. teach that the amount of the antibacterial zeolite blended in the cosmetic composition is preferably at least 0.1 % by weight in order to obtain a remarkable deodorizing effect; however, the maximum amount is depended on the type of product, such as for an aerosol or stick type, a maximum amount of 70 % or less by weight is preferred (column 4, lines 34-63).

Yamamoto et al. also teach that the particle size of the antibacterial zeolite is preferably not more than 10  $\mu\text{m}$ , and the range of particle sizes is such that particles which exceed 10  $\mu\text{m}$  are not more than 20 % of the total antibacterial zeolite. More specifically, Yamamoto et al. teach a specific zeolite containing silver, zinc and ammonium ions, which has average particle size of about 1.5  $\mu\text{m}$  (which sold under trade name ZEOMIC AJ10D) (column 4, line 65 through column 5, line 3, and column 17, lines 27-31).

Furthermore, Yamamoto et al. teach that the deodorant cosmetic composition can be selectively blended with an aluminum compound that would further enhance the deodorizing effect caused by enhancing the sweat suppressing effect. Suitable aluminum compounds, i.e. aluminum chlorohydroxy compound or alum, can be used (column 7, lines 33-48). Yamamoto et al. then teach that the amount of aluminum compound (e.g. aluminum hydroxychloride) can be from 2 % to 13 % by weight (see Examples 49-51, 56 and 70). With respect to the weight ratio of aluminum compound to antibacterial zeolite, Yamamoto et al. specifically teach a pressed powder, which contains 5 % by weight of aluminum hydroxychloride and 5 % by weight of zeolite that contains silver, zinc and ammonium ions (column 29, Example 70). Therefore, the weight ratio of the alum to zeolite is about 1, as taught by Yamamoto et al., meets the claimed limitation in that the mass ratio of the alum to the zeolite is 0.1 or more.

***Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)***

Yamamoto et al. teach a deodorant cosmetic composition comprising a zeolite that contains antibacterial metal ions and ammonium ions and an aluminum compound. Yamamoto et al. also teach the antibacterial zeolite has an average particle size not more than 10  $\mu\text{m}$ ; Yamamoto et al. do not specifically teach the particle size of the alum employs in the deodorant cosmetic composition. However, the deficiency is cured by the teaching of Fujita et al.

Fujita et al. teach a deodorant composition comprising an agent having an antibacterial function and an agent having neutralization ability (page 3, [0008]).

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More specifically, Fujita et al. teach that the agent that has neutralizing ability is an inorganic acid salt, i.e. alums, which are mixtures of sulfates of various metals include aluminum iron alum, potassium aluminum alum (also called potassium alum), ammonia alum, sodium alum (page 8, [0055-0057]).

Fujita et al. further teach that fine particulate potassium alum, which is sold under trade name TAIACE-K20 with average particle size of 20  $\mu\text{m}$ , can be used in the deodorant composition in an amount of 1 % by mass (page 13, [0103] and page 10, [0109]).

***Finding of prima facie obviousness Rational and Motivation***  
***(MPEP 2142-2143)***

It would have been obvious to a person of ordinary skilled in the art at the time the invention was combine the teachings of Yamamoto et al. and Fujita et al. to arrive at the instant invention.

One of ordinary skill would have been motivated to utilize fine particulate alum as an odor neutralizing agent in combination with an antibacterial zeolite because the prior art, namely Fujita et al. has taught that fine particulate alum is suitable to use in a deodorant composition in combination with an antibacterial agent, for reducing or for neutralizing unpleasant odor produced by bacteria, as taught by Fujita et al.

From the teachings of the references, it would have been obvious that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

***Response to Arguments***

(1) The Declaration under 37 CFR 1.132 filed on 09/22/2008 has been fully considered but it is insufficient to overcome the rejections of claim 1-14 based upon under 35 U.S.C. 103(a) as set forth in the last Office Action. The reason is that the data and results provided in the Declaration are not representative of the claimed invention(s) and are not commensurate in scope with the claims. For instance, the Declaration provides the color stability testing results of the claimed antibacterial zeolite, which contains silver, zinc and ammonium ions. However, the instantly claimed skin treatment composition, as recited in claims 1, 2 and 7, require two components: (i) an antibacterial zeolite that contains silver, zinc and ammonium ions, in combination with (ii) a second component, i.e. a trisalt ethylenediamine hydroxyethyl triacetate (claim 1), or alum and/or dried alum (claim 2), or polyoxyethylene polyoxypropylene 2-decyltetradecyl ether (claim 7).

Therefore, the Declaration filed is insufficient to overcome the rejections as set forth above.

(2) Applicants' arguments, filed on 09/02/2008, with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection as set forth above.

***Conclusion***

No claims are allowed.

Applicant's amendment filed on 09/02/2008 necessitated the new ground of rejections presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

#### ***Contact Information***

Any inquiry concerning this communication from the Examiner should direct to Helen Mei-Ping Chui whose telephone number is 571-272-9078. The examiner can normally be reached on Monday-Thursday (7:30 am – 5:00 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where the application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for



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published applications may be obtained from either PRIVATE PAIR or PUBLIC PAIR. Status information for unpublished applications is available through PRIVATE PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the PRIVATE PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/H. C./

Examiner, Art Unit 1616

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616